

WE CLAIM:

1. A printhead assembly which comprises
an elongate support structure; and
5 at least one elongate printhead module positioned on the support structure, along a
length of the support structure, the, or each, printhead module comprising
a supply structure that is connectable to at least an ink supply and defines a
plurality of outlets for the supply of at least ink;
a micromolded ink distribution assembly that is positioned on the supply
10 structure, the ink distribution assembly defining a mounting formation to permit a
printhead chip to be mounted on the ink delivery assembly, a plurality of ink inlets
that are in fluid communication with the outlets of the supply structure, a plurality
of exit holes and tortuous ink flow paths from each ink inlet to a number of
respective exit holes; and
15 a printhead chip that is mounted on the ink distribution assembly so that the
ink can be fed from the exit holes to the printhead chip.
2. A printhead assembly as claimed in claim 1, in which at least a portion of the ink
distribution assembly is of a liquid crystal polymer.
- 20 3. A printhead assembly as claimed in claim 2, in which the ink distribution assembly
includes a lower micromolding that is positioned on the support structure, the lower
micromolding defining a plurality of ink inlets and a plurality of ink chambers in fluid
communication with respective ink inlets, and an upper micromolding, the upper
25 micromolding also defining a plurality of ink inlets in fluid communication with respective
ink chambers and the exit holes in fluid communication with respective ink inlets.
4. A printhead assembly as claimed in claim 3, in which the upper micromolding is of
a liquid crystal polymer.
- 30 5. A printhead assembly as claimed in claim 3, in which the upper and lower
micromoldings are of a liquid crystal polymer.

6. A printhead assembly as claimed in claim 3, in which a film layer is interposed between the upper and lower micromoldings, the film layer defining a plurality of openings that permit ink flow from the lower to the upper micromolding.

5 7. A printhead assembly as claimed in claim 6, in which the openings of the film layer are the result of a laser ablation process carried out on the film layer.

8. An ink distribution assembly for an ink jet printhead assembly having an elongate support structure, at least one elongate printhead module positioned on the support
10 structure, along a length of the support structure, the, or each, printhead module having a supply structure that is connectable to at least an ink supply and defines a plurality of outlets for the supply of at least ink, the ink distribution assembly being micromolded and defining a mounting formation to permit a printhead chip to be mounted on the ink delivery assembly, a plurality of ink inlets that are in fluid communication with the outlets of the
15 supply structure, in use, a plurality of exit holes and tortuous ink flow paths from each ink inlet to a number of respective exit holes.

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